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## ABSTRACT

A study examined the effect of the prereading activity called story impressions on reading comprehension and oral reading miscues of students. Story impressions give clues concerning characters and events in an as yet unread story and ask the students to write a story to make the story fragment comprehensible. Subjects, 60 second grade students attending elementary school in southeastern Idaho, were randomly assigned to the control and experimental groups. Subjects in the experimental group were presented with the story impressions and wrote a story which incorporated the clues given into a coherent framework. Results indicated that subjects exposed to the story impressions, whether above or below average readers, scored significantly higher on postreading comprehension tests. Results indicated that the enhanced comprehension scores were not related to the degree of success subjects had in approximating the actual characters and events in the story. Results also indicated that story impressions had no influence on oral reading miscues. (Five tables of data and two figures are included, and 30 references are attached.) (RS)

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Story Impressions 1

Effects of Providing Story Impressions as  
a Prereading/Writing Activity on the Story Comprehension  
and Oral Reading Miscues of Second-Grade Readers

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## ABSTRACT

This investigation examined the usefulness of story-impressions as a new prereading/writing activity for improving story comprehension and altering the quantity and quality of students' oral reading miscues. Story-impressions are story fragments which enable students to compose an anticipatory model of an yet to-be-read passage by giving them clues as to how characters and events interact within the story. After reading the set of clues, second-grade students were asked to render them comprehensible by composing a story (called a story guess) of their own before reading the author's actual tale. The results indicated that students in the story-impressions group, whether above or below average readers, answered significantly more of the postreading test questions correctly than students who simply read the story. In addition, the story-impressions preview was shown to have an equal effect on both impressions-related and impressions-unrelated test items. Hence, the beneficial effects of the story impressions were not limited to increasing recall of clue-related information. Examination of the match (several measures) between the readers' story guesses and the author's actual text further demonstrated that the enhanced comprehension scores of the students in the story-impressions group were not contingent upon students' being able to closely approximate the author's story in their own story-guesses. Despite its impact on story comprehension, the story-impressions preview failed to have any effect on the students' oral reading miscues.

Effects of Providing Story Impressions as  
a Prereading/Writing Activity on Story Comprehension  
and Oral Reading Miscues of Second-Grader Readers

The purpose of the present investigation is to evaluate the usefulness of an instructional technique called story-impressions for improving second-grade readers processing of unfamiliar narrative passages. This is a new procedure that has not been tried with young readers. The technique is wholly consistent with contemporary theoretical developments in the understanding of basic comprehension processes (Anderson & Pearson, 1984; Johnson-Laird, 1983; Rumelhart, 1980, 1984). A second major purpose is to determine whether or not a prereading activity which aims at enhancing readers' comprehension in this fashion also affects the quantity and quality of their oral reading miscues.

Perhaps the most persistent and inescapable lesson from reading research over the last decade is that we understand what is new to us in terms of what we already know (Anderson & Pearson, 1984). Emphasis on the role of prior knowledge in comprehension has renewed interest on the part of reading professionals in finding ways to help readers activate relevant knowledge schemes before and during the reading process (Moore, Readence, & Riekeiman, 1982). One approach has been to devise ways to preview a passage before it is read. The object of a preview is to increase what Pehrsson and Robinson (1985) have termed the proximity between the reader and the author of the text by helping the reader to retrieve relevant knowledge or by supplying the reader with advance information about the content of the material itself.

Thematic previews have been investigated as one means of increasing the proximity of reader and text. Dooling and Lachman (1971) gave subjects a thematic title or prepassage before reading vague metaphorical passages. On both a free recall and a paced binary recognition task, subjects receiving the title performed better than those not receiving the title. They concluded that the thematic title provides a scheme or surrogate structure to help in understanding such vague passages. Gardner and Schumacher (1977) investigated the effect of three types of prereading organizers (thematic prepassage, topic sentence, and no information) on recall of difficult subordinate and coordinate texts. They found that providing subjects with the thematic prepassage organizer facilitated recall to a greater degree than either topic sentences or no information. In like manner, Bransford and Johnson (1973) found that subjects who were supplied with information in the form of a thematically relevant picture prior to reading a passage demonstrated increased comprehension and recall scores.

A more elaborate previewing method for reducing the distance between reader and text is to provide readers with an overview of the content of the material to be read. In several studies (Graves, Cooke, & Laberge, 1983; Graves & Palmer, 1980; Slater, Graves, & Piche, 1985), subjects were supplied with prior information about the specific content of a story in the form of a written preview. The previews ranged from 400 to 600 words in length and provided students with a foundation for understanding the story by describing key elements about the plot, characters, point of view, tone, setting, as well as the theme. In other instances, definitions of difficult words and explanations of complex concepts were added to the existing list.

These studies found that providing junior high students with detailed previews of difficult short stories increased recall as assessed by a variety of comprehension measures. Similar results were obtained by Graves & Cooke (1980), when they provided eleventh grade students with oral previews prior to their reading short stories.

As an alternative approach to previewing, McGinley and Denner (1987) have suggested facilitating the construction of an anticipatory model of the story on the part of the reader instead of providing them with thematic or specific content knowledge. One way this could be achieved is by giving readers a very minimal amount of specific information from a passage in the form of story impressions and asking them to engage in the formulation of their own hypotheses regarding the to-be-read story. Story impressions are story fragments in the form of clue words which enable readers to form impressions about how characters and events interact within the story. After reviewing the clues which are linked in the same order they occurred in the story, readers are asked to express their hypotheses about the forthcoming story in the form of a written story guess. As a written preview, the story guess represents the readers anticipation of the structure and content of the yet-to-be-read tale.

To illustrate, Figure 1 presents a set of story impressions for "The Tell-Tale Heart" by Edgar Allen Poe (McGinley & Denner, 1987, p. 250). If the reader has never read the specific story from which the impressions were selected, current schema theory (Rumelhart, 1984) would suggest that the reader will begin searching for promising schemata to account for the particular array of clues. In the case of "The Tell-Tale Heart," the clues

are most likely to suggest some sort of murder schema that may ultimately conclude with a confession. As a further illustration, Figure 1 also presents a story guess written by an eighth-grade student (remedial reader) using the story impressions extracted from "The Tell-Tale Heart." Note that the central events of the hypothesized story depict a murder scene and confession complete with incidents similar to those of the original Poe tale. The role of the story impressions was to provide an overall impression of the structure of the story sufficient to stimulate the reader to begin constructing an adequate and comprehensible account for the configuration of clues.

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 Insert Figure 1 about here  
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How could students arrive at an interpretation for a series of impressions when given such minimal amounts of information? The research of Ross and Bower (1981) offers a possible explanation. They experimented with using groups of words in a fashion similar to story impressions. When viewed together the words were found to activate for nearly all subjects a more general, overall schema. For example, the set "princess," "mouth," "hold," "dial," would tend to activate a TELEPHONE schema (p.6). Story impressions might function in much the same manner by suggesting plausible event schemas in which they could be embedded. With story impressions, the sequence of the clues would also be expected to supply further constraints on schema selections.

An investigation by Rumelhart (1984) offers additional support for this

interpretation of the way in which story impressions might be expected to function. In an attempt to track the hypothesis testing process of individuals during reading, Rumelhart presented stories to subjects one line at a time. Subjects were asked to give their ongoing interpretation of the story after reading each line. Rumelhart discovered that readers developed strong impressions about certain aspects of the story. Particular "words and phrases appeared to suggest from the bottom-up certain frameworks of interpretation", and in many cases, a single word in the line of a story was enough to suggest a totally new interpretation for the story (p. 17). The act of constructing a story guess (framework of interpretation) based on a set of story impressions is presumed to operate in much the same way, employing the same methods of interpretation readers use as they compose a referential model while reading any story, except using far fewer clues.

Thus, once a story guess is devised, it can serve as a source for predictions about the events of the upcoming story. These predictions can then be confirmed, modified or disconfirmed as the reader encounters the details of the actual story in a manner identical to that described by Rumelhart (1984) for the general process of understanding a story. In this way, story impressions ought to enable readers to formulate their own anticipatory previews, and thus have a subsequent beneficial effect on story comprehension and retention. The purpose of the present study was to investigate this possibility. It was predicted that students who developed a written story-guess based on story impressions would demonstrate enhanced story comprehension and recall.

Reading ability was also included as a factor in this study because of

its potential to moderate the effects of any preview technique. Below-average readers might be expected to benefit most from the story-impressions preview activity, while for above-average readers it may be less effective, if at all, due to the fact that proficient readers tend to make predictions (be interactive readers) when reading anyway (Rumelhart, 1984). An alternative possibility was that the story-impressions technique would prove to be more effective for the better readers because their written story-guesses might be expected to match more closely the author's tale (Pehrsson & Denner, 1985). Hence, in addition to reading ability, this study also examined the degree to which students' written story guesses must resemble the author's actual story for the previewing method to be effective.

#### Effects of Prior Knowledge on Reading Miscues

A recent study by Taft and Leslie (1985) examined the effects of prior knowledge on reading miscues for average third grade readers. They found that children with high prior knowledge of the story topic made fewer total miscues and fewer miscues which resulted in meaning loss than students with low prior background knowledge. Very little research has been done on the effects of background knowledge on oral reading miscues. As an instructional technique aimed at activating learners' prior knowledge, the construction of a story-guess based on story-impressions could have a similar positive effect on the quality of students' reading miscues. Investigation of this possibility was another major purpose of the present research. It was predicted that students receiving the story-impression preview would make fewer total reading miscues and fewer meaning loss

miscues than students who read the story without a preview. In addition, it was predicted that the beneficial effects of the story-impressions preview on the pattern of oral reading miscues would be greater for below-average as compared to above-average readers.

#### METHODS

##### Subjects

A total of 60 second grade students attending elementary school in southeastern Idaho participated in this study. Based on a median split of their Science Research Associates (1979) SRA achievement series reading composite scores ( $M_d = 76$ ,  $Q = 15.78$ ), the students were classified as above average or below average readers. The students were then randomly assigned to either the story impressions preview ( $n = 30$ ) or to the no preview ( $n = 30$ ) treatment condition.

##### Materials

The passage used in this investigation was a short story by David Stearns (1946) entitled "Chuckie Makes A Friend". The readability of the 841 word passage, as computed by the Fry (1978) and Dale-Chall (1954) formulas, fell at the late second to early third grade reading level. For each sentence of the story, normative ratings of the "structural importance" (SI) were computed according to procedures outlined by Johnson (1970). These normative ratings provided a basis for selection of the story impression, as well as a basis for later comparison of the author's actual text with the readers' written story-guesses. The normative ratings were obtained by asking 30 college students to rate each text sentence (divided into pausal units) as to its importance to the overall meaning of the

passage. The college students were assigned to one of three subgroups having the task of eliminating  $1/4$ ,  $1/2$ , or  $3/4$  of the sentence subunits that were least important to the overall semantic content of the story. A count of the number of times a sentence subunit was judged essential (retained rather than eliminated) provided the measure of its structural-importance. Based on these ratings, the 108 pausal units of the story were classified according to 6 levels of structural-importance (Johnson, 1970).

Story Impressions were developed from the set of story-units rated at the highest two levels (levels 1 & 2) of structural-importance. The 34 subunits were arranged according to the order in which they occurred in the story. Fourteen units were then selected which provided significant clue information about the setting, characters and major elements of the plot. A second researcher also chose 14 units. The initial percentage of correspondence between the independently selected sets of story units was 79% indicating sufficient interrater agreement for the purposes of this investigation. The two researchers then came to a consensus on a final set of 14 units from which the story impressions for this investigation were derived. Next, the selected story-units were reduced to a single word or telegraphic phrase. A maximum of three words were used per impression. The 14 clues were arranged vertically and marked with arrows to indicate clue order. Figure 2 presents the set of story impressions developed for this investigation.

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 Insert Figure 2 about here  
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The posttest consisted of 21 questions which targeted specific information about characters and events contained in the story passage. For example, one sentence read "He was a fat, furry young ground hog who loved to lie in the sun", and the related posttest question asked, "What kind of an animal was Chuckle?" To be considered correct, the students had to respond with the specific information contained in the passage. For the question above, the only acceptable answer was "ground hog." In some instances, variations in phrasing and synonyms were also considered correct when they did not alter the meaning of a given passage sentence. Of the 21 comprehension questions, 9 of the items were related to the clues supplied by the story impressions, while 12 of the items assessed recall of information unrelated to the clue words contained in the story impressions. The accuracy of the scoring procedure was evaluated by having an independent rater "blindly" rescore all (taped) recall performances. The correlation between the two independent assessments was  $r = .97$ ,  $p < .001$  ( $n = 60$ ).

### Procedures

For the story-impressions group ( $n = 30$ ), the experimenter presented an example set of clues unrelated to the to-be-read selection. Next, he introduced the process of composing a story guess using the sample clues. During this process, the subjects in the story-impressions group contributed suggestions as to how the sample clues might be connected. The researcher next read (orally) the composed story with the students. After this, the experimenter distributed the set of story-impressions for "Chuckle Makes A Friend." The students were instructed to link the clues together in the same manner demonstrated and to generate a story guess of their own. The

entire process took approximately 60 minutes. During the hypothesis generation and story writing phase for the story-impressions group, the read-only control group ( $n = 30$ ) went to another classroom where they completed prearranged activities unrelated to the experimental passage which had been supplied by the cooperating teachers.

After writing their stories, the students in the story-impressions group read their stories individually to one of the two researchers conducting this phase of the experiment. Each student was then given a copy of "Chuckie Makes A Friend" to read for the first time. When the students finished reading the assigned story, they were asked (orally) the posttest questions. The students' oral responses to these questions were tape-recorded. During the same period of time, the students in the control group also met individually with one of the two experimenters to read the story and answer orally the same set of comprehension questions. The order in which the students from both experimental conditions met with and were assigned to the two researchers was determined on a random basis.

### Miscue Analysis

The students' oral reading miscues were analyzed according to a modification of Goodman & Burke's (1972) miscue analysis. According to this procedure, any response which does not constitute a word-for-word reproduction of the printed message in its spoken form, or any lack of response, scored as a miscue. For the purposes of this investigation five categories of miscues were defined as follows: (1) contextually appropriate miscues judged syntactically and semantically appropriate for the context, (2) meaning-loss miscues judged as not contextually appropriate or as not

highly similar to the original meaning of the passage, (3) graphemically similar miscues judges as beginning with and containing a high proportion of the same letters as the word appearing in the passage, (4) phonetically similar miscues judged as sounding like the word contained in the text passage, and (5) self-correction, those miscues that were corrected by the students themselves.

Two research assistants "blind" to treatment conditions but experienced in miscue analysis were trained to score the students' oral reading responses according to the modified categories described above. Interrater reliability for the scoring procedure ( $n = 60$ ) for each of the scoring categories was evaluated using Pearson product-moment correlation procedures. The correlations between the two sets of ratings were  $r = .84$  for total miscues,  $r = .97$  for contextually appropriate miscues,  $r = .90$  for meaning loss miscues,  $r = .94$  for graphemically similar miscues,  $r = .86$  for phonetically similar miscues and  $r = .52$  for self-correction. All scorings of the miscue data were determined to display sufficient interrater reliability for the purposes of this investigation, except for the category of self-correction which was dropped from further analysis. The scorings completed by the first research assistant were selected (at random) for use in all subsequent analyses.

## RESULTS

### Total Cued Recall

The effect of using story-impressions as a previewing activity on immediate cued-recall for above and below average second-grade readers was assessed using a  $2 \times 2$  ANOVA. The dependent measure was the total number of

correct answers on the 21 item posttest. Table 1 presents the means and standard deviations of the posttest comprehension scores for the two treatment conditions by reading ability level. The results revealed a significant main effect for treatment condition,  $F(1,56) = 7.51$ ,  $MSe = 9.2$ ,  $p < .01$ . The students who engaged in the preview activity ( $M = 16.5$ ) correctly answered significantly more of the comprehension questions than students ( $M = 14.5$ ) who simply read the story. In addition, the above average readers ( $M = 16.7$ ) recalled significantly more story information,  $F(1,56) = 9.69$ ,  $p < .01$  than below average readers ( $M = 14.3$ ) but reading ability was not found to interact,  $F(1,56) = .85$ ,  $p = .82$  with the preview treatments. These results suggest the use of story-impressions as a previewing strategy facilitates comprehension of the story when it is subsequently read for the first time and the beneficial effects of the story impressions preview extend to both above and below average readers.

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 Insert Table 1 about here  
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#### Impression Related/Unrelated Recall

The impact of story impressions on both impression related and unrelated posttest items was assessed using 2 by 2 ANOVAs with preview treatment (story impressions versus reading-only) and reading proficiency (above versus below median readers) serving as the between subjects factors. The results revealed that above-average readers scored significantly better than below-average readers for both impressions-related,  $F(1,56) = 4.04$ ,  $p < .05$  and impressions-unrelated test questions,  $F(1,56) = 10.81$ ,  $p < .01$ , and

differences in reading proficiency did not interact with preview condition for either impressions-related .  $F(1,56) = .04$ ,  $p = .85$ , or impressions-unrelated test questions,  $F(1,56) = .04$ ,  $p = .85$ . Students in the story-impressions group ( $M = 8.3$ ) exceeded the reading-only control group ( $M = 7.5$ ) in recall of impressions-related items,  $F(2,55) = 5.21$ ,  $MSe = 2.0$ ,  $p < .05$ , and the story-impressions group ( $M = 8.2$ ) also exceed the control group ( $M = 7.0$ ) in recall of items unrelated to the story impressions,  $F(2,55) = 4.70$ ,  $MSe = 4.34$ ,  $p < .05$ . These results imply that the beneficial effects of the story-impressions preview were not limited to increased recall of clue-related information.

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 Insert Table 2 about here  
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#### Reader/Author Proximity

For students in the story-impressions group, the relations among the student-author proximity ratings and posttest comprehension scores were evaluated using Pearson product-moment correlations. Table 2 presents the means and standard deviations for the student-author proximity scores. The intercorrelations among the posttest scores and student-author proximity scores are presented in Table 3.

The results revealed that the amount of global proximity between the students' stories and the author's tale was not significantly related to total comprehension scores,  $r = -.03$  ( $p = .45$ ), impressions-related recall,  $r = -.11$  ( $p = .28$ ), or impressions-unrelated recall,  $r = .01$  ( $p = .47$ ). In addition, the number of matching story-units was not significantly related

to total recall,  $r = -.06$  ( $p = .37$ ), impressions-related recall,  $r = -.14$  ( $p = .23$ ), or impressions-unrelated recall,  $r = -.02$  ( $p = .46$ ). The average degree of match between a student's story and the author's story was also not found to be significantly related to total recall,  $r = -.01$  ( $p = .48$ ), impressions-related recall,  $r = -.04$  ( $p = .42$ ) or impressions-unrelated recall,  $r = .00$  ( $p = .50$ ). These results suggest that students' ability to approximate the author's story in their own written story-guesses was not related to their subsequent enhanced recall performance, and therefore was not the major factor explaining the beneficial impact of the story impressions preview.

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 Insert Table 3 about here  
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#### Relations of Proximity Measures to Ability

In order to examine whether or not higher ability-students were better able to write story-guesses that matched the author's actual tale, the relations among the the ability measures and the proximity measures were evaluated using Pearson product-moment correlation. Only the global proximity measure was shown to be significantly related to reading ability (composite SRA scores)  $r = .30$ ,  $p = .05$ . The correlations for number of matches,  $r = .28$  ( $p = .06$ ), as well as for average degree of match,  $r = .23$ , ( $p = .11$ ) were not shown to be significantly related to the reading ability measure. A limitation of these findings concerns the small number of subjects who participated in this study. With a larger number of subjects, each of these small correlations may have proved statistically significant.

Because of the relatively small sample, these results were interpreted to mean that there was a tendency for above-average readers to develop stories that had somewhat greater correspondence to the author's story than the story guesses developed by below-average readers. Overall, student/author story proximity, however, was not found to be significantly related to the enhanced posttest scores of students in the story impressions group.

#### Effect on Oral Reading Miscues

Due to the sizable difference in variance between the above average readers and the below average readers in total number of miscues, the effects of the experimental treatments on total miscues was evaluated separately for each reading ability level using a single factor ANOVA. Table 4 presents the means and standard deviations of the preview and no preview treatments by reading ability level. The single factor ANOVA for total miscues for the above average readers did not yield a significant effect for treatment condition,  $F(1,29) = 1.46$ ,  $p = .24$ . The single factor ANOVA for total miscues for the below average readers also failed to yield a significant effect for treatment condition,  $F(1,25) = 1.48$ ,  $p = .24$ . Together these results suggest that the story-impressions preview does not affect the total number of oral reading miscues made by above or below average readers in the second grade.

In order to evaluate more specifically whether the story-impressions preview affected the pattern of oral reading miscues made by the second graders, the five categories of miscues (contextually appropriate, meaning loss, self-correction, graphemically similar, phonetically similar) were analyzed using a 2 x 2 MANOVA with preview condition (story-impressions

versus no preview) and reading ability level (above versus below average) serving as the between subjects factors. The students' reading miscues within each category were converted to proportions in order to stabilize their variances. The means and standard deviations for the proportion of reading miscues under each category by preview condition and reading ability level are presented in table 5. Preliminary tests for homogeneity (Box's  $M = 23.9$ ,  $F(30,7637) = .69$ ,  $p = .90$ ) indicated that the assumption of homogeneity of variance for the MANOVA was met for the proportional data.

The multivariate tests for the main effects of preview condition, approximate  $F(4,51) = .23$ ,  $p = .92$  and the preview by reading ability interaction effect, approximate  $F(4,51) = .38$ ,  $p = .82$ , were not significant. These results suggest that the story-impressions preview, despite its impact on comprehension scores, did not affect the pattern of the students' oral reading miscues. The multivariate test for the main effect of reading ability level proved significant, approximate  $F(4,51) = 4.26$ ,  $p < .01$ . Subsequent univariate analyses revealed that the above average readers differed from the below average readers in the number of contextually appropriate miscues,  $F(1,54) = 9.19$ ,  $p = .004$ , meaning loss miscues,  $F(1,54) = 4.49$ ,  $p = .04$ , and graphemically similar miscues,  $F(1,54) = 6.56$ ;  $p = .01$ . There was no significant difference between these groups in phonetically similar miscues,  $F(1,54) = 3.65$ ,  $p = .06$ . In general, these results conform to the expected pattern of oral reading miscues for above- and below-average beginning-level readers (Goodman & Burke, 1972; Leslie, 1980; Perfetti, Goldman, & Hogaboam 1979).

## DISCUSSION

Effects on Story Recall

As expected, second-grade students who engaged in the story-impressions preview activity correctly answered more of the posttest comprehension questions than students who simply read the story. Additionally, unlike other successful previews (Graves & Cooke, 1980; Graves & Palmer, 1980; Graves, Cooke & Laberge, 1983) the story-impressions preview did not give away large amounts of story content in order to improve comprehension. In fact, when creating stories from story impressions, the readers were involved in formulating their own preview content. Hence, story impressions have been shown to be an effective prereading technique for narrative passages. Moreover, the story-impressions preview proved to be effective for both above and below average readers.

Effects on Oral Reading Miscues

Contrary to our predictions, the story-impressions preview was not found to affect the pattern of students' oral reading miscues, despite the fact that the story-impressions activity did enhance postreading comprehension scores. This finding is inconsistent with the results of Taft and Leslie (1985) who found that students with high background knowledge of a story topic made fewer total miscues and fewer meaning-loss miscues than students with lower topic knowledge. The reason for the difference in results is not clear, but may relate to the way in which background knowledge was accessed in each instance. In the Taft and Leslie study students with higher background knowledge had greater access to specific knowledge of vocabulary words related to the topic of the story. Such

specific semantic information should, as it did, facilitate recognition of words directly related to the topic. Whereas, the story-impressions preview in the present study simply cued students to retrieve or to compose plausible event structures without necessarily leading them to anticipate the actual event structures or specific content of the story. Hence, the story-impressions preview placed far fewer constraints on topic relevant vocabulary, and therefore failed to supply enough specific semantic information to facilitate word recognition. This raises the issue of how the story-impressions preview affected subsequent story comprehension if not by activating content-specific background knowledge.

#### How Story Impressions Improved Story Comprehension

Why did writing a story guess based on story impressions improve comprehension of the actual story when it was subsequently read for the first time? One possibility was that the readers would be able to accurately guess many aspects of the specific content of the story and that this would facilitate their comprehension of the story as it was read. The results of the present experiment did not confirm this to be the case. It was found that a student's ability to approximate the author's story in their own story guess was not significantly related to her or his subsequent enhanced posttest scores. Of course, other factors related to the quality of the student's written story guess not measured in this study may have had an impact. Nevertheless, based on the measures employed in this investigation, the amount of content accurately guessed did not have an effect on posttest scores.

A second possibility was that students simply paid more or closer

attention to the clue-words contained in the story-impressions when they read the actual story, and this enhanced their recall. Our results did indicate that the story-impressions preview enhanced recall of impressions-related test items but the technique also enhanced the recall of test items that were unrelated to the clue-words contained in the story impressions to the same degree. Hence, it seems very unlikely that the observed improvement in total recall was due simply to increased attention to the clue-words alone. Moreover, if attention were the significant factor then one would have expected to find a correlation between the number of matches (same story-units) between the student/author stories and subsequent posttest scores, and this was not the case. Future research on the use of story-impressions might include a preview group which only reviewed the story clues without composing a story guess, but this condition was included in a pilot study conducted by Denner and McGinley (1986) with eighth grade students and failed to show a facilitative effect.

How then did the act of writing an hypothesis story based on story impressions enhance comprehension?. An alternative explanation is that the process of developing the hypothesis story itself, whether correct or incorrect, and then actively testing it out was the major factor in facilitating comprehension. Based on his experiments with one-line-at-a-time reading, Rumelhart (1984) concluded that understanding a story is an interactive process, one that involves using story information as clues for the formation of hypotheses (creation of an anticipatory model), followed by a series of dynamic revisions based upon subsequent confirmation or disconfirmation of the hypothesized interpretation. In this

respect, evaluation of the goodness-of-fit of an hypothesized story guess based upon story impressions ought to markedly resemble the thought processes Rumelhart has suggested are involved in the actual understanding of stories. In this way, the reader's written attempt to account for the configuration of the clues presented in the story-impressions preview in this study appears to have functioned more as a preview to an interactive reading process, than as a preview to the story's actual content.

In support of this interpretation, it has been our informal observation that composing a story as part of a prereading activity prompts readers to spontaneously realign the perspective from which they read the story. Interestingly, students begin to direct many of their comments during class discussions (post-reading) to issues related to the author's craft. Apparently, because of their involvement in writing their own version of the story based on the clues, they begin to view themselves as authors as well. Thus, story-impressions as a previewing technique may be an effective means for improving comprehension because it disposes students to approach reading from the perspective of a writer. In other words, they begin to realize that reading, much like their own writing, is a composing process that requires their active participation in the progressive refinement and revision of initial predictions and expectations (Tierney & Pearson, 1983).

### Conclusion

Further research is needed to establish whether it is attention to impression-related information, evaluation and revision of predictions, or the composition process itself, or some combination of these factors that is most responsible for subsequent increases in story comprehension following

the story impressions preview activity. Still, at this point, the findings support teachers' use of story impressions as a prereading/writing activity to improve students' story comprehension.

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Table 1

Mean Posttest Scores by Preview Condition and Reading Ability Level

Groups	Total			Impressions- Related		Impressions- Unrelated	
	n	M	SD	M	SD	M	SD
No Preview Control	30	14.5	3.7	7.5	1.8	7.0	2.4
Low Readers	14	13.1	4.3	7.1	2.3	6.0	2.3
High Readers	16	15.8	2.7	7.9	1.1	7.9	2.2
Story Impressions	30	16.5	2.7	8.3	1.0	8.2	2.0
Low Readers	15	15.3	2.8	8.0	1.2	7.3	2.0
High Readers	15	17.7	2.0	8.7	.5	9.0	1.8

Table 2

Means of the Student/Author Proximity Scores

	Story Impressions Preview		
	n	M	SD
Global Proximity	30	33.3	11.7
Number of Matches	30	15.7	5.1
Average Degree of Match	30	1.9	.3

Table 3

Intercorrelations Among Posttest Scores and Student/Author Proximity Scores

Factors	1	2	3	A	B	C
1 Total Score	-	.74**	.96**	-.03	-.06	-.01
2 Impressions-Related Items		-	.54**	-.11	-.14	-.04
3 Impressions-Unrelated Items			-	.01	-.02	.00
A Global Proximity				-	.98**	.86**
B Total Matches					-	.78**
C Average Degree of Match						-

\*  $p < .05$ \*\*  $p < .001$

Table 4

Mean total miscues by preview condition and reading ability level

	Total Miscues		
	n	M	SD
No Preview	29	48.2	55.5
Below Average Readers	13	80.8	70.6
Above Average Readers	16	21.8	10.0
Story-Impressions Preview	29	39.9	35.1
Below Average Readers	14	53.3	44.8
Above Average Readers	15	27.5	15.7

Table 5

Mean proportion of miscues in each category by preview condition and reading ability level

		Contextually Appropriate		Meaning Loss		Graphemically Similar		Phonetically Similar	
Group	n	M	SD	M	SD	M	SD	M	SD
No Preview	29	.56	.21	.36	.21	.42	.19	.37	.18
Below Average Readers	13	.46	.21	.42	.20	.48	.21	.41	.19
Above Average Readers	16	.64	.18	.32	.22	.37	.17	.34	.17
Story-Impressions Preview	29	.56	.20	.40	.20	.43	.17	.37	.15
Below Average Readers	14	.48	.17	.47	.17	.49	.17	.42	.14
Above Average Readers	15	.62	.21	.34	.21	.37	.16	.32	.15

**Figure 1. Story Impressions (prereading) activity  
based on Poe's "The Tell-Tale Heart"**

Story impressions given to a class	A remedial 8th grader's story guess written from the story impressions
<p>house ↓ old man ↓ young man ↓ hatred ↓ ugly eye ↓ death ↓ tub, blood, knife ↓ buried ↓ floor ↓ police ↓ heartbeat ↓ guilt ↓ crazy ↓ confession</p>	<p>There was a young man and his father, an old man. They lived in a house on a hill out in the bouniey's. The old man hated his son because he had an ugly eye.</p> <p>The young man was asleep in his bedroom when he was awakend by screaming. He went to the bedroom and saw his father laying in the tub. There was blood everywhere and a knife through him.</p> <p>The young man found a tape recording hidden behind the door on the floor. He turned it on there was screaming on the tape. The young man started to call the police, but then he stopped and remembered what his mother had told him. She had told him that he had a split personality. So he called the police and confessed to being crazy and killing his father. His heartbeat was heavy as he called.</p>

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FIGURE CAPTIONS

Figure 2. Story impressions for "Chuckle Makes A Friend" by David Stearns.

GROUND HOG  
↓  
FRIGHTENED BY DOG  
↓  
POPPED INTO HOLE  
↓  
ASLEEP  
↓  
FLOOD  
↓  
HIGH ROCK - SAFETY  
↓  
PUPPY DOG  
↓  
FRIGHT  
↓  
STAYED TOGETHER  
↓  
NOT ENEMIES  
↓  
ONE YEAR LATER  
↓  
BIG FIERCE DOG  
↓  
WAGGED TAIL  
↓  
OLD FRIENDS